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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/065,061	09/13/2002	John Geddes Erbes	24-NS-122726	2594

23465 7590 09/02/2003

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EXAMINER

PALABRICA, RICARDO J

ART UNIT PAPER NUMBER

3641

DATE MAILED: 09/02/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/065,061

Applicant(s)

ERBES, JOHN GEDDES

Examiner

Rick Palabrica

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 26 June 2003.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-4, 6-9 and 11-19 is/are pending in the application.
- 4a) Of the above claim(s) 13-19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-9 and 11-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_. 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. Applicant's amendment in Paper No. 8, which corrects the specification, amends claims 1, 6 and 12, and cancels claims 5 and 10, is acknowledged. This amendment is in response to Office Action dated March 26, 2003.

2. Applicant further traversed the restriction requirement that has been made final in said Office Action. Applicant's additional arguments have been fully considered but found unpersuasive.

First, applicant alleges that the "wedge apparatus recited in method claims 13-19 cannot be used as a jet pump in a petroleum industry." The applicant clearly misreads the restriction requirement in the Office Action, dated 11/05/02. In said Office Action, the examiner refers to "apparatus" as a "nuclear reactor jet pump with piping support wedge", as recited in claim 6. This apparatus can clearly be used in another application such as a petroleum refinery because a jet pump and any appurtenance, e.g., a support wedge, can be used for either a nuclear or non-nuclear application. Even for the sake of argument, one assumes the apparatus to be an alleged "wedge", which the applicant claims for use in a nuclear jet pump, it can also be used for another materially different process, e.g., as a wedge in a jet pump of a refinery process system.

Second, the applicant notes that the Erbes patent (U.S. 6,052,425), which the examiner applied in the rejection of the elected apparatus claims, is classified under class 376, subclass 260. The applicant then alleges that this contradicts the examiner's assertion that the individual searches of the apparatus claims (classified under 376/372)

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and method claims (classified under 376/260) would not be co-extensive, because the examiner would not have found the Erbes patent had he not searched class 376, subclass 260. Again, the applicant is seriously mistaken because Erbes patent, while issued under class 376, subclass 260, is crossed with other subclasses, i.e., 372, 404, 392 and 285. These other subclasses contain the Erbes patent. The examiner's search of class 376/372 for the apparatus claims yielded the Erbes patent.

Based on the above, the final restriction requirement has a firm basis.

3. Applicant also traversed the use of Wivagg in the rejection of claims. As further explained below, applicant's arguments have been fully considered but found not persuasive.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by either one of Wivagg (U.S. 6,463,114) or Weems et al. (U.S. 5,964,029)

Wivagg discloses a wedge apparatus for a BWR jet pump in Figs. 6-9, comprising a first tapered wedge segment having a first and second end portions (51), second tapered wedge segment having a first and second end portions (52). These segments are joined at the top end through lug structure 54 having a bore therethrough.

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There is a slot defined by an area between the first end portions and the joined second portions. The longitudinal axes of the first and second segments are substantially parallel to each other. Applicant's claim language "notch" reads on "chamfered side " 57 of Wivagg.

Applicant traversed the use of Wivagg on the grounds that the "two jack blocks are not joined to form a U-shaped body." The examiner disagrees. Note in Fig. 7b that if one draws an imaginary line starting from the bottom left and side 61, through the block 51, up to lug structure 54 and down to block 52 and right hand side 51, a U figure is obtained. Thus, Wivagg 's wedge reads on the claim language "to form a substantially U-shaped body."

Applicant also traversed the use of Wivagg on the grounds that structures 51 and 52 are "not rotated with respect to each other along a longitudinal axis of the apparatus." The examiner again disagrees. Based on the specification (paragraph 0025) and the drawings (e.g., Fig. 4), the term "rotated" means that the two segments of the claimed wedge are symmetrical with respect to the longitudinal axis 98. The Wivagg apparatus reads on this limitation because structures 51 and 52 are symmetrical with respect to a longitudinal axis through the center of structure 54. If the applicant intends the term, "rotated" to mean a physical turning motion around a longitudinal axis then this either: a) makes the limitation a method limitation, which does not serve to patentably distinguish the claimed invention over Wivagg (see below); or b) creates potential non-enablement and indefiniteness issues under 35 U.S.C. 112, first and second paragraphs, respectively.

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The claims are replete with statements that are either essentially method limitations or statements of intended or desired use. For example, “for a jet pump in a nuclear reactor”, “engagable with said inlet mixer”, “to receive a restrainer bracket set screw”, “deformable around said set screw”, are rotated with respect to each other along a longitudinal axis of said apparatus”, etc. These clauses, as well as other statements of intended use do not serve to patently distinguish the claimed structure over that of the reference, as long as the structure of the cited references is capable of performing the intended use. See MPEP 2111-2115.

See also MPEP 2114 that states:

A claim containing a “recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus” if the prior art apparatus teaches all the structural limitations of the claim. Ex parte Masham, 2 USPQ2d 1647.

Claims directed to apparatus must be distinguished from the prior art in terms of structure rather than function. In re Danly, 263 F.2d 844, 847, 120 USPQ 528, 531.

[A]pparatus claims cover what a device is, not what a device does.” Hewlett-Packard Co. v. Bausch & Lomb Inc., 15 USPQ2d 1525, 1528.

As set forth in MPEP 2115, a recitation in a claim to the material or article worked upon does not serve to limit an apparatus claim.

The apparatus in the cited reference is capable of functioning in the same manner and for the same intended or desired use as the claimed invention.

Weems et al. disclose in Figs. 5 and 6 an apparatus that can be used as a wedge. Applicant’s claim language reads on Weems et al.’s apparatus as follows: a) “first tapered wedge segment” reads on structure 136; b) “second tapered wedge

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segment” reads on structure 126; c) “slot” reads on the area defined between the two segments when assembled (e.g., space between 120 and 122); d) “lug” reads on structure 200; e) “bore” reads on hole penetrated by bolt 216 . The first end portion of each segment is towards the open end 112, 114, and the second end portion is toward the part where the segments are connected (i.e., adjacent to tapered sections 140, 190).

Note in Fig. 5, that the structure forms a substantially U-shaped body. The segments 126 and 136 are both tapered, as clearly shown in the tapering of associated parts 190 and 140, respectively. The segments are symmetrical (rotated) with respect to a longitudinal axis through the center of 216 and the center of the slot. Applicant’s claim language “notch” reads on indentation 144 on segment 136 and indentations (192, 198) on segment 126.

As to statements that are either essentially method limitations or statements of intended or desired use, the same remark as in *Wivagg’s* apparatus applies to *Weems et al.’s* device.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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5. Claims 6-9, 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's own admissions, in view of either one of Wivagg or Weems et al. Applicant admits that it is conventional to have a wedge support between a restrainer bracket and an inlet mixer of a nuclear reactor jet pump of a boiling water reactor shown in Figs. 1-3 (e.g., see specification, paragraph 0004). Applicant himself provides examples of these prior art wedges.

Prior art meets the claims except for the specifics of the wedge assembly.

MPEP 2129 [R-1] states:

"When applicant states that something is prior art, it is taken as being available as prior art against the claims. Admitted prior art can be used in obviousness rejections."

As to claim 11, the Wivagg or Weems et al. apparatus is capable of being "sized to receive a restrainer bracket set screw." Note that the slot can always be adjusted to a size capable of "receiving", i.e., able to enclose a setscrew. As to claim 12, the Wivagg or Weems et al. apparatus is also capable of being deformable around a setscrew. Note that any metal structure that is forced to grip another structure, such as a metal screw, inherently suffers some deformation.

Either one of Wivagg or Weems et al. teach an apparatus that provides a cost-effective expedient for maintaining proper separation between coolant-bearing components in a boiling water reactor, including pipes. One having ordinary skill in the art would have recognized that both one Wivagg's or Weems et al.'s apparatus and the wedges in admitted prior art are in the same field of endeavor. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made



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to modify the apparatus, as disclosed by applicant's admission of prior art, by the teaching of either Wivagg or Weems et al. , to gain the advantages thereof (e.g., maintain appropriate separation of components), to have a wedge apparatus having a first and second portions forming a substantially U-shaped form, said portions rotated with respect to each other along a longitudinal axis, and a slot defined between said portions, because such modification is no more than the substitution of one wedge structure by another well-known wedge structure in the nuclear art.

### ***Conclusion***

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rick Palabrica whose telephone number is 703-306-5756. The examiner can normally be reached on 7:00-4:30, Mon-Fri; 1st Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Carone can be reached on 703-306-4198. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

RJP  
August 29, 2003

*Charles T. Jordan*  
CHARLES T. JORDAN  
JUL 29 2003  
FEDERAL BUREAU OF INVESTIGATION  
U.S. DEPARTMENT OF JUSTICE